

#### ABSTRACT OF THE DISCLOSURE

Human G-protein parathyroid hormone (PTH) receptor polypeptides and DNA (RNA) encoding such polypeptides and a procedure for producing such polypeptides by recombinant techniques is disclosed. Also disclosed are methods for utilizing such polypeptides for identifying antagonists and agonists to such polypeptides and methods of using the agonists and antagonists therapeutically to treat conditions related to the underexpression and overexpression of the PTH receptor polypeptides. Also disclosed are diagnostic methods for detecting a mutation in the PTH receptor nucleic acid sequences and detecting a level of the soluble form of the receptors in a sample derived from a host.